

ABSTRACT OF THE DISCLOSURE

A stall detection circuit and method for a stepper motor.

The circuit has an H-bridge configuration with an additional circuit pathway to ground being connected at a point between two center windings. During the transition between step sequences, the circuit employs a monitoring phase in which the previously active low side driver is turned off such that current passes through only the first winding and then is diverted to ground via the additional pathway. While the phase voltage is thus momentarily extinguished, the second coil is used to monitor the motor's back EMF, from which it can be determined whether the rotor is in a normal running mode, a stall, or a reverse condition.